

WHAT IS CLAIMED IS:

1. A wireless system comprising:

a mobile terminal; and

a plurality of communication systems for
communication with the mobile terminal, the systems being
different from each other, characterized in that

the communication systems each have base stations
belonging to a sub-network which is unique to the communication
system, each sub-network being connected to an Internet by way
of a gateway provided for the sub-network, and

the mobile terminal has a plurality of mobile station
network interfaces which can access the communication systems
respectively, and means of switching communication systems
accessed by the mobile station network interfaces depending on
the communication quality of the communication systems.

2. A wireless system comprising:

a mobile terminal; and

a plurality of communication systems for
communication with the mobile terminal, the systems being
different from each other, characterized in that

each of the communication systems has base stations
belonging to a sub-network which is unique to the communication
system, each sub-network being connected to an Internet by way
of a gateway provided for the sub-network, and

the mobile terminal has a plurality of mobile station
network interfaces which can access the communication systems

respectively, and means of switching the communication systems accessed by the mobile station network interfaces based on cell position information of cells which are formed by the base stations of the communication systems and the present location of the mobile terminal and depending on the cell at the present location.

3. The wireless system as in claim 2, further characterized in that:

the communication system switching means sets switching positions of the communication systems based on the cell position information and route information in a case of implementation of route guidance of the mobile terminal by means of a navigation system, and carries out switching depending on a relation between the switching positions and the present location.

4. The wireless system according to claim 1, further characterized in that:

a first sub-network has a home agent and a second sub-network has a foreign agent; and

the mobile terminal makes access by using a home address in a case of communication with the base station which belongs to said first sub-network or makes access by using a care-of address determined by the foreign agent in a case of communication with the base station which belongs to said second sub-network.

5. The wireless system as in claim 4, wherein the base station which belongs to said first sub-network communicates with the mobile terminal faster than the base station which belongs to the said second sub-network.

6. A wireless system comprising:

a mobile terminal;

a plurality of sub-networks; and

a plurality of base stations each of which communicates with the mobile terminal by using a plurality of communication systems which are different from each other, characterized in that the plurality of sub-networks is arranged so that one of the base stations, which communicates with the mobile terminal by using a same communication system belonging to a same sub-network of said plurality of sub-networks, and

the plurality of sub-networks are each connected to an Internet by way of gateways which are positioned for the plurality of sub-networks.

7. The wireless system as in claim 6, further comprising:

a plurality of mobile station network interfaces which can access the plurality of communication systems respectively;

wherein a communication system is accessed by one of the mobile station network interfaces depending on the communication quality of the communication systems.

8. The wireless system as in claim 7, further comprising switching means for switching between communication systems wherein the switching means switches the communication systems accessed by the mobile station network interfaces based on the cell position information of cells which are formed by the base stations of the communication systems, a current location of the mobile terminal, and depending on the cell at the current location.

9. The wireless system as in claim 8, wherein the switching means switches between the communication systems based on the cell position information and route information in a case of implementation of route guidance of the mobile terminal by means of a navigation system, and carries out switching by comparing switching positions and the current location.

10. The wireless system as in claim 9, further comprising means for modifying the cell position information, wherein said means for modifying the cell position information determines before switching at a next switching position that communication by use of the communication system in current use cannot be maintained.

11. The wireless system as in claim 7, further comprising means for determining the data transmission rate capabilities of the communication systems for which service is currently available to the mobile terminal; means for selecting the

currently available communication system with the highest data transmission capability; means for sending the mobile station network interface for the communication by use of the selected highest data transmission rate communication system into a send/receive-enabled state and other mobile station network interfaces into a standby state, and if communication by use of the selected highest data transmission rate communication system cannot be maintained, sends the mobile station network interface for the communication by use of the high-speed communication system into the standby state and another mobile station network interface into the send/receive-enabled state.

12. The wireless system as in claim 7, further comprising: means for determining the data transmission rate capabilities of the communication systems for which service is currently available to the mobile terminal; means for selecting the currently available communication system with the highest data transmission capability; means for sending each of the plurality of mobile network interfaces into a send/receive-enabled state, and, if communication by use of the high-speed communication system which is highest in communication speed among the communication systems is possible, communication is performed by using the high-speed communication system, and if communication by use of the high-speed communication system cannot be maintained, communication is performed by using a communication system which is wider in service area than the high-speed communication system.

13. The wireless system as in claim 7 wherein the mobile station network interfaces make access using temporary IP addresses which are obtained from a server in each of the plurality of sub-networks which belong to the plurality of communication systems.

14. The wireless system as in claim 7 wherein the mobile station network interfaces make access by using fixed IP addresses.

15. A wireless system comprising:

a mobile terminal; and

a plurality of communication systems for communication with the mobile terminal, the systems being different from each other, characterized in that

the communication systems each have base stations belonging to a sub-network which is unique to a one of said plurality of communication systems, each of said communication systems being connected to an Internet by way of a gateway provided for the sub-network, the gateway having a router function for routing between the internet and the sub-network, and

the mobile terminal has a plurality of mobile station network interfaces, each of which can access a different one of the plurality of communication systems, and means for routing located between the mobile station network interfaces and a

section of running application software, said means for routing thereby switching the communication systems by connecting the application software running section to any one of the mobile station network interfaces.

5

16. The wireless system as in claim 15, wherein each of the gateways and the means for routing have routing tables used for the routing, and means for revising contents of the respective routing tables.

17. The wireless system as in claim 16 wherein said means for revising contents of the respective routing tables is responsive to a command from the mobile terminal to update said routing tables.